



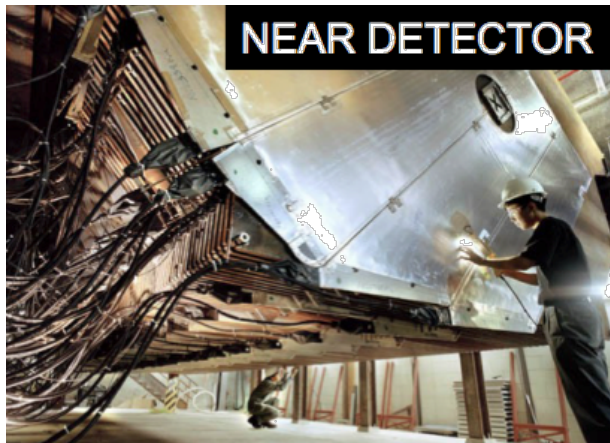
MINOS+ Status Report



Donatella Torretta
All Experimenters' Meetings
March 3, 2014



Near Detector

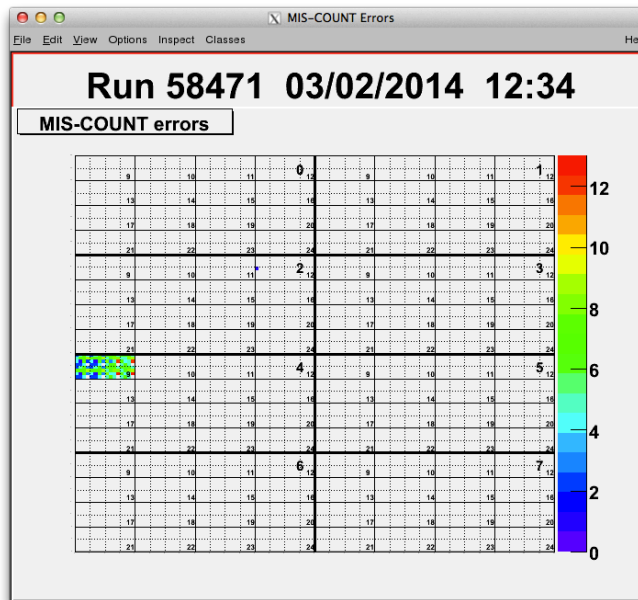


DAQ

- DAQ running great. No problems to report.

Electronics

- Master 4-9 shows MIS-COUNT errors in each and every Minders/Menus
 - We'll replace it at the next beam downtime





Far Detector



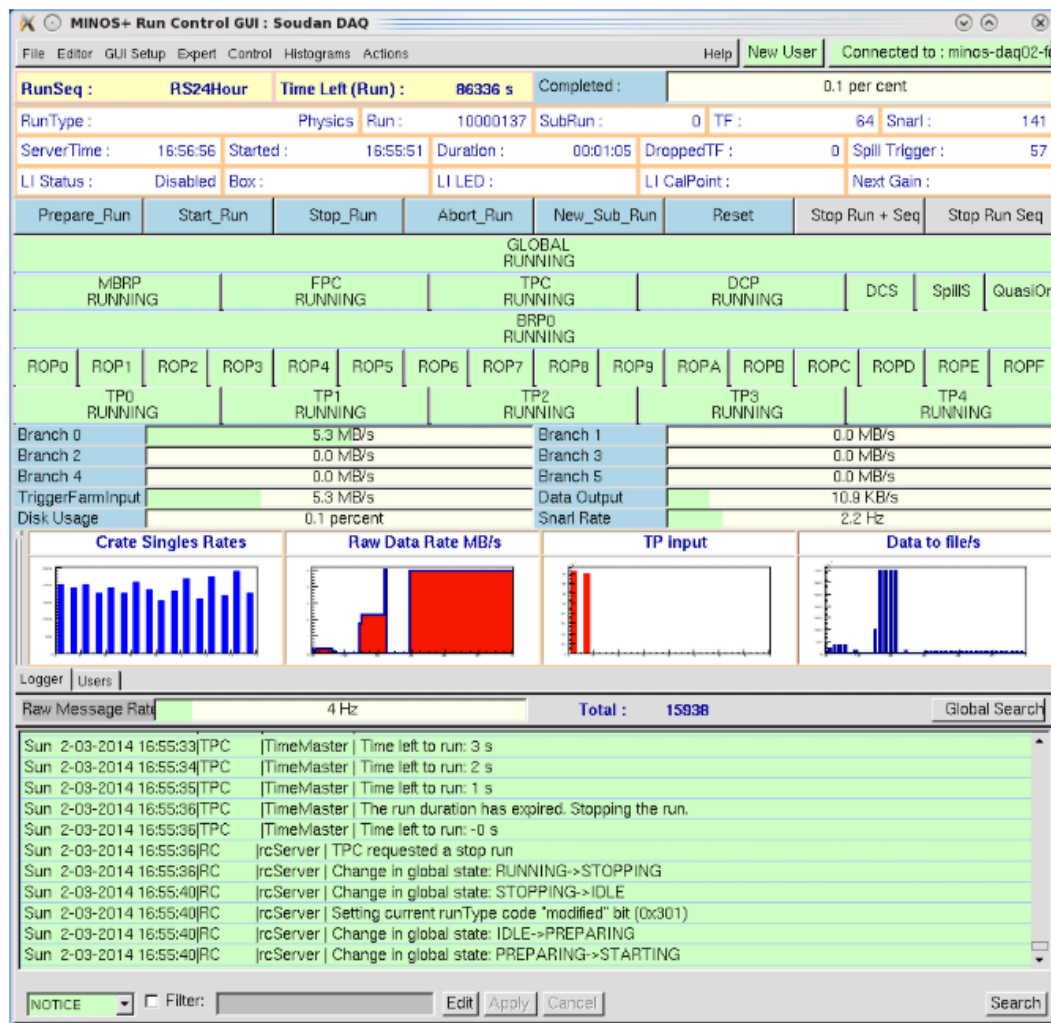
DAQ

- FD **old**-DAQ (PCI bus based) crashed on Sunday February 23rd
- Multiple failures on multiple components
- Many hours of work by the Mine Crew and DAQ people
- However, we have not been able to recover it .

**** BUT ****



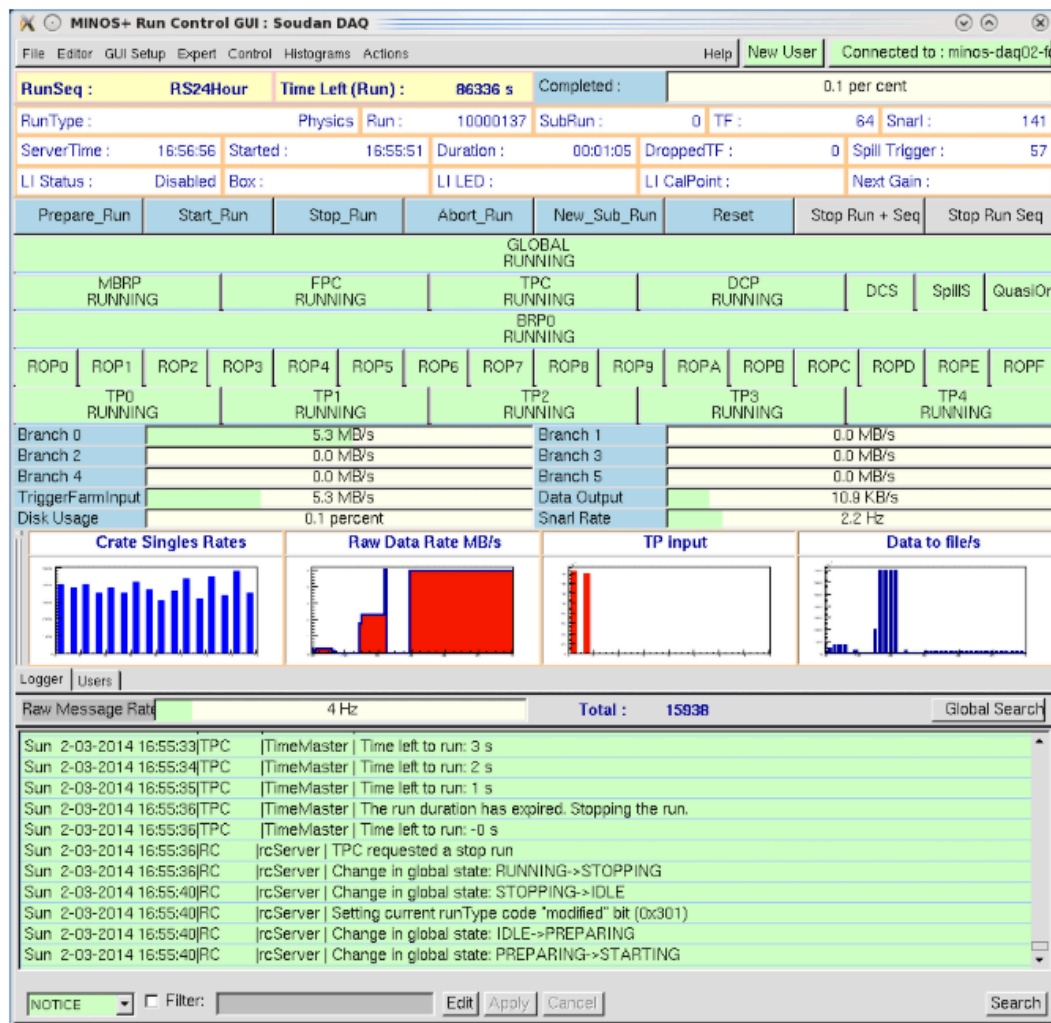
Far Detector new DAQ is running!



- Ethernet based DAQ
- ** Amazing tour de force by Bill Badgett here, Jerry Meier and Jeff Gunderson at Soudan **
- On Friday morning, Bill got the VMetro bus analyzer running in Crate 9
- Steady and fast progress in understanding the MVME/ VARC's interactions since
- Added crates few at the time. Then all.
- IMPORTANT: data is transferred from EACH of the MVME 5500 to one Daq computer via GigaBit Ethernet cables
- NO dedicated PCI cards involved
- Fewer points of failures: more reliable system
- Easier to partition in subparts: easier to debug



Far Detector new DAQ is running!



- Did NOT touch the Timing System (daqtpc)
- All Daq servers are newer and better
- Installed with SLF6
- Latest Root version
- MVME CPUs are using VxWorks 6.9
- Collaboration agreed to do a fast track reconstruction of the beam data
- Data Quality and Calibrations groups will check data as well



Far Detector **old**-DAQ problems



torretta's X desktop (daqdev.minos-soudan.org:3)

MINOS Run Control GUI : DAQ System

File Editor GUI Setup Expert Control Histograms Actions Help New User Connected to daqrc

RunSeq: RS24Hour Time Left (Run): 16780 s Completed: 80.4 per cent

RunType: Physics Run: 53915 SubRun: -1 TF: -1 Snarl: 777

ServerTime: 7:14:33 Started: 11:52:31 Duration: 00:11:42 DroppedTF: 0 Spill Trigger: 643

LI Status: Disabled Box: LI LED: LI CalPoint: Next Gain: ?

GLOBAL ERROR

MRP0 ERROR	MRP1 IDLE	MRP2 ERROR	MRP3 IDLE	MRP4 ERROR	MRP5 IDLE
ROP0 IDLE	ROP1 IDLE	ROP2 IDLE	ROP3 IDLE	ROP4 IDLE	ROP5 IDLE
ROP6 IDLE	ROP7 IDLE	ROP8 IDLE	ROP9 IDLE	ROP10 IDLE	ROP11 IDLE

Branch 0: 0.0 MB/s Branch 1: 0.0 MB/s

Branch 2: 0.0 MB/s Branch 3: 0.0 MB/s

Branch 4: 0.0 MB/s Branch 5: 0.0 MB/s

TriggerFarmInput: 0.0 MB/s Data Output: 0.0 KB/s

Disk Usage: 6.1 percent Snarl Rate: 0.0 Hz

Raw Message Rate: 0 Hz Total: 3 Global Search

Mon 3-03-2014 07:14:20|RC |rcServer| User dt from DAQ System @198.124.213.170 connected on fd 15

NOTICE Filter: Edit Apply Cancel Search

- PVIC (PCI Vertical InterConnect bus) based system
- Many points of failure (many PCI cards installed in crates and computers)
- Optical and differential cables throughout
- Difficult to trouble shoot
- Problems moved around on the bus
- Replaced many many components to no avail



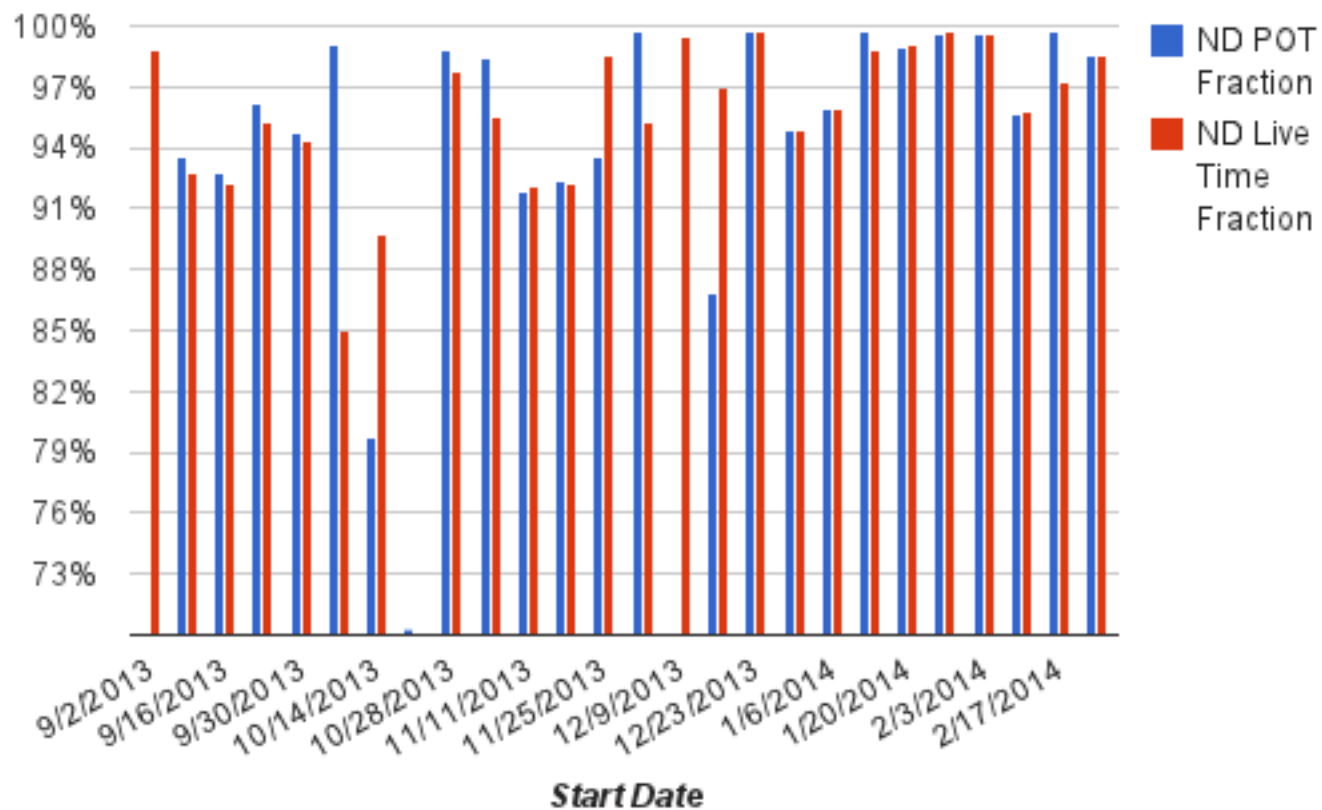
MINOS+ Status



Start Date/Time	End Date/Time	Near Detector		Far Detector	
		POT Fraction	Live Time Fraction	POT Fraction	Live Time Fraction
12/30/13 00:00:00	01/06/14 00:00:00	94.9%	94.9%	98.5%	98.5%
01/06/14 00:00:00	01/13/14 00:00:00	95.9%	95.9%	98.7%	98.8%
01/13/14 00:00:00	01/20/14 00:00:00	99.7%	98.8%	99.8%	99.3%
01/20/14 00:00:00	01/27/14 00:00:00	99.0%	99.1%	95.2%	94.8%
1/27/14 12:00 AM	2/3/14 12:00 AM	99.7%	99.7%	95.8%	96.6%
2/3/14 12:00 AM	2/10/14 12:00 AM	99.5%	99.6%	94.9%	95.2%
2/10/14 12:00 AM	2/17/14 12:00 AM	95.7%	95.7%	99.9%	99.0%
2/17/14 12:00 AM	2/24/14 12:00 AM	99.7%	97.2%	78.0%	87.0%
2/24/14 12:00 AM	3/3/2014 12:00 AM	98.5%	98.5%	0%	0%



ND POT fraction and Live Time Fraction





FD POT Fraction and Live Time Fraction

